12-22-05

Attorney's Docket No. <u>047559/286038</u>

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Kim, et al.

Confirmation No.: 1924

Appl. No.: 10/517,679

Examiner:

To be assigned

Filed:

For:

May 17, 2005

Pub. Date:

October 27, 2005

Pub. No.:

US-2005-0239642-A1

CATALYTIC FILTER FOR REMOVING SOOT PARTICULATES FROM

DIESEL ENGINE EXHAUST AND METHOD OF PREPARING THE SAME

December 21, 2005

Mail Stop PG-PUB Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## REQUEST FOR A CORRECTED OR REVISED PATENT APPLICATION PUBLICATION UNDER 37 C.F.R. §1.221(b)

Sir:

Certain errors appear in the patent application publication identified above. The publication does not include inventors that were included in the Declaration as filed with the USPTO on May 17, 2005, a copy of which is enclosed. The failure to include these inventors is a material mistake made by the Office which is apparent from Office records. Applicant therefore requests a corrected patent application publication under 37 C.F.R. §1.221(b), for which there is no fee.

Please correct the publication errors as reflected on the first page of the publication attached and as follows:

(76) Inventors: Yong-Woo Kim, Daejeon (KR);

Joon-Seok Min, Daejeon (KR);

Sung-Hyoan Kim, Daejeon (KR);

Chang-Q Lee, Daejeon (KR);

Wha-Sik Min, Daejeon (KR)

DEC 23 2005

In re: Kim, et al. Appl. No. 10/517,679 Filed: May 17, 2005

It is respectfully requested that a corrected patent application publication be granted for the above-identified application, in accordance with 37 C.F.R. §1.221(b). This request is made in order to correct the mistakes incurred through the fault of the Patent Office.

It is not believed that fees are required; however, any required fees therefore are hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

Cynthia V. Hall

Registration No. 56,544

Customer No. 00826 ALSTON & BIRD LLP

Bank of America Plaza 101 South Tryon Street, Suite 4000 Charlotte, NC 28280-4000 Tel Atlanta Office (404) 881-7000 Fax Atlanta Office (404) 881-7777 "Express Mail" mailing label number EV 700808499 US Date of Deposit December 21, 2005

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Mail Stop PG-PUB, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

SMODRE

Shana Moore



(19) United States

## (12) Patent Application Publication (10) Pub. No.: US 2005/0239642 A1 Kim et al.

(43) Pub. Date:

Oct. 27, 2005

- (54) CATALYTIC FILTER FOR REMOVING SOOT PARTICULATES FROM DIESEL ENGINE EXHAUST AND METHOD OF PREPARING THE SAME
- (76) Inventors: Yong-Woo Kim, Daejeon (KR); Joon-Seok Min, Daejeon (KR)

Correspondence Address: **ALSTON & BIRD LLP** BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000 (US)

(21) Appl. No.:

10/517,679

(22) PCT Filed:

Apr. 14, 2004

PCT No.: (86)

PCT/KR04/00856

(30)

Foreign Application Priority Data

(KR) ..... 10-2004-0012642

### **Publication Classification**

(51) Int. Cl.<sup>7</sup> ...... B01D 53/34; B32B 27/02; B05D 1/12

.. **502/219**; 422/180; 422/177; 422/171; 427/180; 427/430.1

#### (57)ABSTRACT

Disclosed is a catalytic filter for removing soot particulates from diesel engine exhaust, which is comprised of monolithic oxidation catalyst upstream of the catalytic filter, which effectively oxidize gaseous pollutants and volatile organic fractions, and a catalyzed wall-flow filter downstream serving to low temperature combustion of soot particulates collected on the filter. Also, the preparation method of the catalytic filter is provided, including the colloidal mixture solution of platinum group metal salts and other metal salts with a water-soluble polymer and a reducing agent, which is then impregnated on a catalyst support, followed by calcining at high temperatures. In the present invention, use of the catalytic filter provides effective means of abating diesel exhaust pollutant emissions, that is, particulate matter (PM) and gaseous pollutants (HC, CO, NOx).

Sung-Hyoan Kim, Daejeon (KR) Chang-Q Lee, Daejeon (KR) Wha-Sik Min, Daejeon (KR)



Attorney Docket No. 047229/286038

## DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, mailing address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

# CATALYTIC FILTER FOR REMOVING SOOT PARTICULATES FROM DIESEL ENGINE EXHAUST AND METHOD OF PREPARING THE SAME,

the spe	ecification of which	
	is attached hereto	
	OR	
$\boxtimes$	was filed on 4/14/2004 as PCT International Application Number PCT/KR2004/0008	356
r 1 1.		

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application	r Foreign Application Number(s)  Country  Foreign Filing Date (MM/DD/YYYY)		Priority	Certified Copy Attached?	
Number(s)		(MM/DD/YYYY) Not Claimed	Yes	No	
2003-23515	· KR	04-14-2003			×
2004-12642	KR	02-25-2004			

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

The undersigned hereby authorizes the U.S. attorney or agent named herein to accept and follow instructions from my Korean representatives, C&S Patent and Law Office, as to any action to be taken in the U.S. Patent and Trademark Office regarding this application without direct communication between the U.S. attorney or agent and the undersigned. In the event of a change in the persons from whom instructions may be taken, the U.S. attorney or agent named herein will be so notified by the undersigned.

POWER OF ATTORNEY: As a named inventor, I hereby appoint the practitioners associated with the Customer Number provided below to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, and direct that all correspondence be addressed to that Customer Number:

## **Customer Number 00826**

Direct telephone calls to:

J. Scott Young

Registration No. 45,582

Tel Charlotte Office (704) 444-1000 Fax Charlotte Office (704) 444-1111

Full name of (first/sole) inventor:

Yong-Woo Kim

Inventor's

Signature:

Date:

Residence:

Daejeon, Korea

Citizenship;

Korea

Mailing Address:

109-204 Chunggoo Apt., Jeonmin-dong, Yusong-gu

Daejeon 305-390 Korea

Full name of second inventor:

Joon-Seok Min

Inventor's

Signature:

Date: 122.200 Daejeon, Korea

Residence:

Citizenship:

Korea

Mailing Address:

106-404 Expo Apt.

464-1 Jeonmin-dong, Yusong-gu

Daejeon 305-761 Korea

Full name of third inventor:

Sung-Hyoan Kim

Inventor's

Date:

Signature: Residence:

Daejeon, Korea

Citizenship:

Korea

Mailing Address:

102-905 Sejong Apt. Jeonmin-dong, Yusong-gu Daejeon 305-728 Korea

Full name of fourth inventor: Chang-Q Lee

Inventor's

Signature:

Lee

Residence:

Daejeon, Korea

Citizenship:

Korea

Mailing Address:

Wha-Sik Min

104-1108 Sangroksoo Apt.

Mannyun-dong, Seo-gu Daejeon 302-781 Korea

Full name of fifth inventor:

Inventor's

Signature:

Date:

Daejeon, Korea

Residence: Citizenship:

Korea

Mailing Address:

101-602 Expo Apt.

Jeonmin-dong, Yusong-gu Daejeon 305-761 Korea